

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-17. (Cancelled).

18. (Previously Presented) A method of cutting, comprising:

slicing into tissue with a helical knife to draw tissue proximally toward a cutting portion, the helical knife having a slicing edge extending through an opening at least partially bounded by the cutting portion; and

cutting the tissue with the cutting portion.

19. (Original) The method of claim 18, wherein cutting the tissue comprises cutting the tissue into discrete pieces.

20. (Original) The method of claim 18, further comprising providing the helical knife on an inner member and the cutting portion on an outer member.

21. (Original) The method of claim 20, further comprising transporting the cut tissue along a helical channel defined by the helical knife.

22. (Original) The method of claim 21, further comprising aspirating the cut tissue through a hollow interior in the inner member.

23. (Original) The method of claim 22 wherein aspirating the cut tissue comprises aspirating the cut tissue through an opening in a wall of the inner member.

24. (Original) The method of claim 20, further comprising aspirating fluid through an opening in the outer member.

25. (Currently Amended) A cutting instrument, comprising:
an outer member having an opening at least partially bounded by a cutting edge; and
a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having an edge configured to slice into tissue, the edge of the helical knife extending through the opening such that, during use, the edge slices into tissue to draw the tissue proximally along the helical knife towards the cutting edge.

26. (Previously presented) The instrument of claim 25 wherein the edge of the helical knife extends distally through the opening.

27. (Previously presented) The instrument of claim 25 wherein the cutting edge and the edge of the helical knife are configured to cut tissue by a shearing action.

28. (Previously presented) The instrument of claim 25, further comprising:
an inner member received within the outer member, the helical knife being located at a distal end of the inner member.

29. (Previously presented) The instrument of claim 28 wherein the inner member defines an aspiration opening, the aspiration opening being located at a proximal end of the helical knife.

30. (Previously presented) The instrument of claim 25 wherein the edge comprises a helical edge and the helical knife includes a helical channel.

31. (Previously presented) The instrument of claim 30 wherein the helical channel has a proximal end, a distal end, and a pitch, the pitch of the helical channel increasing from the distal end to the proximal end.

32. (Previously presented) The instrument of claim 30 wherein the helical channel terminates in an opening through a wall of the inner member.

33. (Previously presented) The instrument of claim 25 wherein the outer member defines a fluid ingress opening through a wall of the outer member in a distal region of the outer member.

34. (Previously presented) The instrument of claim 25 wherein the cutting edge is located at a distal end of the outer member.

35. (Previously presented) The instrument of claim 25 wherein the outer member tapers to the cutting edge.

36. (Previously presented) The instrument of claim 25 wherein the cutting edge comprises a circumferential cutting edge.

37. (Previously presented) The instrument of claim 36 wherein the cutting edge is circular in shape.

38. (Previously presented) The instrument of claim 25 wherein the cutting edge is part-circumferential.

39. (Previously presented) The instrument of claim 38 wherein the cutting edge is circular in shape.

40. (Previously presented) The instrument of claim 38 wherein the cutting edge is oblong in shape.

41. (Previously presented) The instrument of claim 25 wherein the outer member includes a shield portion extending distally from the cutting edge.

42. (new) A cutting instrument, comprising:
an outer member having an opening at least partially bounded by a cutting edge; and
an inner member received in the outer member for rotation relative to the outer member, the inner member including a shaft having a helical knife with a V-shaped cross section defining a sharp, slicing edge.

43. (new) The instrument of claim 42, wherein the helical knife is located at a distal end of the inner member.

44. (new) The instrument of claim 42 wherein a clearance between the inner member and the outer member is in the range of about 0.0005 to 0.002 inches.

45. (new) The instrument of claim 42 wherein the inner member defines an aspiration opening, the aspiration opening being located at a proximal end of the helical knife.

46. (new) The instrument of claim 42 wherein the helical knife includes a helical channel.

47. (new) The instrument of claim 46 wherein the helical channel has a proximal end, a distal end, and a pitch, the pitch of the helical channel increasing from the distal end to the proximal end.

48. (new) The instrument of claim 46 wherein the helical channel terminates in an opening through a wall of the inner member.

49. (new) The instrument of claim 42, further comprising a hub coupling the inner member to the outer member.

50. (new) The instrument of claim 42 wherein the outer member defines a fluid ingress opening through a wall of the outer member in a distal region of the outer member.

51. (new) The instrument of claim 42 wherein the cutting edge is located at a distal end of the outer member.

52. (new) The instrument of claim 42 wherein the outer member tapers to the cutting edge.

53. (new) The instrument of claim 42 wherein the cutting edge comprises a circumferential cutting edge.

54. (new) The instrument of claim 53 wherein the cutting edge is circular in shape.

55. (new) The instrument of claim 42 wherein the cutting edge is part-circumferential.

56. (new) The instrument of claim 55 wherein the cutting edge is circular in shape.

57. (new) The instrument of claim 55 wherein the cutting edge is oblong in shape.

58. (new) The instrument of claim 42 wherein the outer member includes a shield portion extending distally from the cutting edge.

59. (new) A cutting instrument comprising:
an outer member having an opening at least partially bounded by a cutting edge; and
a helical knife coupled to the outer member for rotation relative to the outer member, the
helical knife configured to slice into tissue, to draw the sliced tissue into the opening, and to
shear the sliced tissue that has been drawn into the opening between the helical knife and the
cutting edge.

60. (new) A method of cutting comprising:
slicing into tissue with a helical knife that extends through an opening of an outer
member, the opening at least partially bounded by a cutting edge;
followed by rotating the helical knife to draw the tissue toward the opening;
followed by shearing the tissue between the helical knife and the cutting edge.